Winter 2014

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- * Spring Plant Sale May 10

Log on to www.waukeshacountyparks.com for more information.

HIDE AND SLEEP

Originally printed in 2002-03 Centerline

What better way to ease through Winter months than to discover a safe and cozy space, dig in, supply, and (in a comfy curl-up) ignore the whole darn season. That's my system. Sometimes it works. Many of the Nature Center's habitants go along with the idea. It's called hibernation.



Hibernation is an inactive sleeplike state that many animals enter into during winter months. The sleeping state is a protection against the cold and reduces the need of food. Body temperatures are lowered. Heartbeat and breathing are slowed down, and the animals need less energy to stay alive. Their stored-up body fat helps them to survive the cold weather when food may be scarce or unobtainable.

One tiny critter practicing a hibernation system is the Meadow Jumping Mouse (Zapus hudsonius). This little creature, in kind weather, uses its long tail for balance and its long hind legs to spring about in the fields, in zigzagging jumps to evade the owls, weasels and other predators of the night. Most mice use a burrow for a year round refuge. The Meadow Jumping Mouse, however, uses the burrow only for its winter-long hibernation. The tiny mammal curls up in the nest, two to three feet below the surface of the ground in October and November, and settles into winter sleep. The nose is bent down between the hind legs and the tail is wrapped round and round the whole body. Here the little mouse remains sleeping until April or May. A tiny fur package, gift wrapped without paper or cord.

Another entertaining character one can spy on only during the warmer months is the Woodchuck or Groundhog (<u>Marmota monax</u>). With his chunky yellowish-gray body, big head, short legs and small bushy tail, the woodchuck can be found waddling around open

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forests, meadows and in watery areas of river and creek. Before winter's hibernation, the woodchuck spends earlier months eating greenery to fatten up. He digs complicated burrow systems, in lengths of 40 feet or more, usually with front and back entrances – at times even side entrances. Tunnels are at least 4 feet in depth so they will be below the frost level. The tunnels are always neat and clean. The nest areas are carefully lined with dry grasses or leaves. When it comes to housekeeping, the groundhog is one neat freak that keeps cleaning, dusting and arranging. The end of October finds the woodchuck in hibernation within a safe warm dwelling. He remains settled in until late winter. One misunderstanding about groundhog behavior has been blown way out of proportion. Myth states that every February 2nd, the groundhog emerges from his burrow to look for his shadow and, because of this curious act, becomes the nation's most sought after weather forecaster. Any woodchuck will shake his big head when confronted with this nonsense. The mammal has spent the better part of the year eating, planning and digging into comfortable accommodations. The groundhog is not going to be interrupted from a great snooze just to look for his shadow, of all things!

Another small mammal roaming Retzer's fields, and a true hibernator, is the Thirteen-lined Ground Squirrel (Spermophilus tridecemlineatus). Also called the Federation Squirrel because of the "stars and stripes" in the back patterns. One becomes curious concerning the number thirteen in the name, because most of the texts list the stripe count at twenty-three. Twelve dark and eleven light. So how did thirteen end up in the equation? In spite of his additions, this little critter is cute and amusing to watch during his before-winter seasons. Like the woodchuck, the ground squirrel is a true hibernator. This squirrel



enters sleep in September or October, and wakes in March or April. So the little guy sleeps through half of his life. Being a burrowing animal, work time is spent constructing underground labyrinths for safe hide-aways, nurseries and hibernation dens. Activities keep the ground squirrel very busy the other half of his life.

Other inhabitants sleeping on the premises, and familiar to all who frequent the trails, are considered partial hibernators. Mammals that go into states of sleep, alone or in groups, and experience bouts of sleep alternating with bouts of wakefulness, fall into this group. They can bring themselves out of hibernation at any time and if the weather should be rather warm for periods, they will go out on excursions for food or exercise. If not so inclined they can picnic on their stored caches. During harsh months of winter they will remain in hidden burrows, crevices, tree openings, etc. Familiar animals in this category are the opossums, raccoons, skunks and chipmunks, to name a few.

For cold-blooded sleepers, hibernation has special consequences. Cold-blooded hibernators include the Amphibians – frogs and toads – and the Reptiles – lizards, snakes and turtles. These small creatures have body temperatures that rise and fall depending upon temperatures around them. As cold weather brings body temps low, hibernation occurs. The reverse also proves true. The cold-blooded can only be aroused when the environment warms enough to heat their bodies. No choice in the matter. However, Amphibian or Reptile, each will try to find suitable space for winter's sleep.





An interesting fact was brought to my attention when deciding to write on hibernation. Noted in an old Retzer log book, dated 9-30-89, the log stated ... "2 Garden Snakes and one Brown Snake were found resting below the surface of a nearly-abandoned Mound Builder Ant colony at edge of Retzer Old-Field #17 and edge of Red Pines – Adventure Trail Pines." The two species were resting together in what is referred to as a Snake Hibernaculum. Strange that two different species of snake would become roommates in the same hibernaculum for the winter. However, in researching for the article, this occurrence was found not to be unusual. Snakes will shelter down to three feet below ground surface. Here they can survive and be protected from freezing during the cold months of winter. They take areas in crevices, abandoned burrows or other holes left in the earth but deep enough to be frost-free. Further research delving around hibernation related that if sites in the area were scarce, snakes, sometimes by the hundreds and of different species, will congregate in the same space to hibernate. The hibernaculum becomes one big slumber party.

See you on the trail,

Shirley Blanchard

References:

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WILD WINTER NIGHT



Ask the Wildlife Specialist-

By: Dick Bautz

Throughout the year, I am asked to respond to natural history and plant questions that come to the Nature Center. Here are a few examples:

1. Someone phoned and mentioned that they saw a snake in the North Prairie area and asked if I could identify it. The snake was seen in an undeveloped area of mixed grass and forbs, mostly non-native plant species, with some open sand-blow areas. The snake was about two and one-half feet long with black white and reddish bands. There is only one snake that fits this description, but remember, that a snake on the move is difficult to observe, and the person that called gave a pretty



good description considering he only saw a quick glimpse of a fast moving snake. Here are some clues if you want to figure it out before I name it. First, the whitish background can vary from almost white to light gray to light brown, and it naturally appears much lighter than the black and reddish markings it surrounds. Second, the reddish color is correct, and in this species it can vary from very red to reddish-brown to brown. These bands are actually large, somewhat evenly spaced blotches, sometimes surrounded by a narrower black border and sometimes the black-red-black-white-black, blotches are near equal in size. The reddest varieties are a favorite of the pet trade. Here are the final clues. Its belly has a distinctive black and white checker board pattern. Its bite is not serious, but the snake can give off an objectionable odor if handled roughly. This is an Eastern Milk snake, Lampropeltis triangulum The Latinized Greek name "Lampropeltis" translates to "bright shield" and "triangulum" refers to the snake's three colors. This species originally lived in oak savannas, upland hardwoods and prairies across eastern North America. Today they can also be found in old fields, around farms buildings; a few years ago while doing a biological survey for the DNR, I saw one in an undeveloped field with some prairie plants next to a Walmart store, most likely hunting house mice around the dumpster. Their principle prey items are small mammals, but they will also take large insects, eggs and nestlings of ground -nesting birds, and smaller snakes. Like all generalist feeders, they are not habitat specialists, and generally survive well in partly degraded habitats. A few years ago, a friend ordered a truck load of wood chips in the fall, and was surprised to find several Milk Snakes and a Fox snake had already retired for the winter into the chip pile before delivery.

2. The next question was about the plastic, "deer whistles" sold to prevent deer-car collisions. The whistles are usually mounted on the front bumper of the car and are claimed to produce an ultra-sonic sound while the car is moving, that will alert the deer and cause it to move away from the roadway. A variety of these devices were tested at UW Madison Department of Wildlife Ecology, and it was found that none of the deer whistles had any effect on deer.

The best way to avoid hitting a deer with your car is to stay alert and avoid the peak activity periods of the deer. Deer-car crashes are greatest in October and November, with a second peak in May and June.

In 2012 there were 710 deer-vehicle crashes in Waukesha County, only Dane (815) and Shawano (800) Counties had more crashes. Unfortunately, the time of day activity pattern for deer coincide with our morning and evening traffic patterns, mainly between 5:00 a.m. to 8:00 a.m. in the morning and again from 5:00 p.m. to 11:00 p.m. in the evening.



3. Questions about ticks have been particularly plentiful this year. The most often asked question was concerned with, "How can I prevent being bitten by a tick? First, avoiding tick infested areas is becoming harder to do. I know several people who actually contracted Lyme disease in their own back yard. Many people use insect repellants containing DEET, this can be effective for a few hours in the woods. The CDC recommends using DEET with a 30% concentration. The 100% DEET products are not any more effective, and prolonged use could lead to neurological problems. For example, of the DEET that contacts your skin some of it is absorbed into your body, and 10% of it can be recovered in a person's urine. As a graduate student researching tick ecology, I needed to keep the ticks alive for Laboratory work so I did not use any repellant. I worked in some of the most heavily tick infested locations in Wisconsin and relied on tucking my pants into tall boots and doing regular tick checks. It works. In one of my study sites I collected over 250 deer ticks in about one hour. I never had a tick on me long enough to begin feeding. Another safe and very effective method of protecting yourself from tick bites is to use a spray containing Permethrin. Almost all major insect spray manufacturers now sell a Permethrin spray. It is applied to boots, clothing, backpacks, etc., usually the day before you wear them. Extensive testing by the US Army has shown that it remains effective for about 10 days, even after going through the washing machine 10 times. Any tick that walks on Permethrin treated areas will never live long enough to attach and feed. Permethrin has a very low toxicity to humans (and all mammals) and very little of it is absorbed through the skin even if your clothing gets soaked in a rain storm. In fact, whatever is absorbed is quickly broken down by ester hydrolysis and rendered inert. If you suspect there may be a tick on your clothing, it is good to remember that a tick can survive the washing machine, but a hot dryer is a sure bet to kill it. Ticks can be active any month of the year. I have found ticks on sunny days in January and February on south facing slopes very actively "questing" for a host on twig or stem of grass. We have about two dozen species of ticks in Wisconsin, many of them are relatively specific for a particular group. Here are a few examples, Ixodes banksi prefers beaver, otter, mink and muskrat. Ixodes cookie (the woodchuck tick) is mostly found on woodchuck and raccoon. Ixodes sculptus is the ground squirrel tick. There are two species of Haemaphysalis ticks in Wisconsin, one is host specific to birds and the other on rabbits and snowshoe hare. The deer tick, or more correctly, the black-legged tick *Ixodes scapularis* and the wood tick Dermacentor variabilis are not very species specific and are the ticks most often found feeding on people.

THE ELEPHANT CATAPILLAR AND THE HAIRY WILLOW-HERB

I saw an "elephant "of sorts at Retzer this summer. It seemed to be enjoying a meal on a purple plant in the fen planting down the trail from the nature center. Actually it was a very large, greenish caterpillar larva of the elephant hawk -moth *Deilephilia elpenor*. It was busy chomping away on the green leaves of an invasive plant we came across at Retzer the other day – the hairy willow-herb *Epilobium hirsutum L*.

The other day while walking by the fen planting here, Dick Bautz (Retzer Naturalist) and I noticed some beautiful purple-magenta tall flowers growing in this wet area. It was when we stopped and took a closer look at the leaf

structure of this plant that we discovered the large caterpillar. There are often surprises like this when you take a closer look at plants and how they fit into the larger picture of the ecosystem. So I will tell you a few more interesting facts about the elephant caterpillar.

The large caterpillar I saw is the larva of the elephant hawk-moth. This moth is a large moth (in the Sphingidae family) but that is not how it got its name. The elephant hawk moth gets its name from the appearance of its larva, not because it's big but because it has a trunk-like nose. "The anterior of the caterpillar appears to have a trunk-like snout. It is this elephant look, rather than its large size, that gives the moth its name. When startled, the caterpillar draws its trunk into its foremost body segment. When it senses danger, like when a bird is looking for a meal, it can withdraw its trunk creating a slightly more bulbous head shape. It has eye-like markings on the sides of its head that can also help it to scare off potential predators "(wikepedia.org). It weighs about 8 grams. (A real elephant weighs about 15,000 lbs.) and it will eventually turn into a moth-the elephant hawk moth late summer-fall. In the mean time it was busy eating the leaves of an invasive plant, at Retzer, the hairy willow-herb. (Real elephants are herbaceous and like to eat leaves too!) Now back to the hairy willow-herb story.

When I first saw this tall purple flowered plant growing in the fen planting (and not recognizing it), I hoped that it was a native. It added a nice colorful accent to the area. There are a variety of purple native plants flowering this time of year at Retzer, like pale purple coneflower, leadplant and purple prairie clover. Unfortunately the



hairy-willow herb is not so great ecologically, where it was growing at Retzer. Like many invasive-type plants it started out as a desirable garden-type plant. Then, unintentionally or intentionally, it got released into natural areas and somehow found its way into the Retzer fen planting.

Like many invasives, it is very colorful, pleasing to the eye and (as an artist) I wanted to paint it! It is a member of the Evening-Primrose family, Onagraceae . Not all willow-herbs are invasive. There are 5 native species of willow-herbs in Wisconsin (Emmet J. Judziewicz, Wildflowers of Wisconsin and the Upper Midwest). They are generally shorter and smaller. I would like to paint them too! They don't have the potential to take over habitats like the hairy willow-herb does. If you want to learn the latest about invasives, there is a book called Invasive Species-What Everyone Needs to Know, by Daniel Simberloff, that offers a wide range of information about invasives.

Another characteristic of the hairy willow-herb is that it has autumnal growth. "Plants with autumnal growth (like many common forest plants such as sweet wild cicely, garlic mustard and many other plants), have a growth spurt in the August-to-September period. This allows them to store more nutrients in the root mass and show a fresh growth above ground after the summer's growth has senesced back. It also allows the plants to get a jump start on next year's growth, and it inadvertently supplies a winter-time banquet just below the snow for everything from meadow voles to white-tailed deer "(Dick Bautz).

There is much more to be discovered at Retzer, like where did all the elephant caterpillars go? They disappeared a few days after we saw them. They probably were a tasty meal for a bird or small mammal.

Janet MacIver Seasonal Biologist



These words will never be uttered when you visit the nature center. Just by stepping out of the car, you are beginning an adventure like no other you have been on before. Stroll your way into the main building, to find a host of exciting discoveries waiting for you to unearth. A 700 gallon fish tank stocked with native Wisconsin fish. No beer battered fish fry for these beauties. Look for the Long Nose Gar with its spear like facial feature, or check out the sneaky Bowfin with an eye spot on its tail, doing it best to imitate the fictional

Push me —Pull me. Work your way over to the glacier rock display and search for a few of the unusual fossils hidden in amongst the sedimentary, metamorphic or igneous specimens. Can you find the state's fossil? Just few steps to the prairie underground to where we have unearthed a menagerie of critters that dwell under this native landscape. Not sure what you have found? Push the button to light up a clue to an above



ground entrance. Still under construction, this exhibit will only get better as new animals are placed in their special cubby. Time for some play, check out the hands-on table where mammal fur, skulls and other cool natural items can bring out the kids in all of us once again. Pick out a puppet or two for an impromptu show, or wrap up in a coyote skin as you sneak up on some unsuspecting prey. Discover the texture of each object as you explore the bones, fungi and hives littering the table top. Don't forget to stop by the wildlife exhibit for a show by each of the nine animals who call the nature center home. They work for a living as they teach school children and adults about their different adaptations and habitats. A couple might be sleeping, as they were up most of the night, or you might find a few just hanging around as they pretend they are sticks. Whatever the show, each will provide a good long viewing before you move onto the next window. Scattered around the hall, animal displays tell a story of what will happen next. Will the fox catch the rabbit? Will Woodcocks find a meal as they poke around in the ground? How can that poor muskrat get any sleep with a party going on outside his den? Take a minute to learn about the geothermal system that helps control the temperature in our building, or watch a video slideshow from the wildlife camera on the TV screen above the bird cage.

Grab a drink of water and head outside for more adventures waiting to be discovered. Start off at the trail-head and pick the best route for you to wander along. Each of the color-coded trails offers a different habitat of plants and animals to explore and enjoy. The Blue trail is a wet and wild journey along the hill side prairie and then down to the pond, where piers provide a handy platform to spy on a few aquatic creatures. Work your way back along creek and low hillside, where the tall Rosinweed and Goldenrod cast a canopy against the creek-side trees.

Meet up with the Red trail, home to a wooded habitat, pick a direction -- do you go south or west? No matter which path you head down, you will continue with your adventure. Heading west, hop on the boardwalk as you cross over this naturally spring fed landscape. Listen for the Red Squirrel scolding you as you pass through its domain. Sneak up on the babbling brook of Retzer Creek. What can you find lurking in the water? Look for Skunk Cabbage or a few uprooted trees as you travel along the path. Once you leave the boardwalk, the tall majestic Scotch



Pines wave to you as the wind blows though. Spy a mushroom fairy ring or collect a handful of chewed pinecones (only to discover all the seeds have been removed). What mysteries await you on the next turn of the trail?

Still not ready to head home, cross over to the Black connector trail spur and work your way through the tall pine plantation and Oak Savanna, uphill for most of the way. Empty out on the Field of Dreams, where "if you



plant it they will come". Home to hawks, owls and other birds of prey just waiting for a small critter to come out of the brush piles scattered around the landscape. Spend a quiet moment as you follow the Green trail through the Legacy Forest and remember all those who have been honored with specially planted Oak trees. Out onto the hay-field, where you might be lucky enough to see the Bobolink displaying its showy dance for protection of its nest. This performance occurs in the late spring to early summer.

Take in the view before you set out on the final leg of your exploration, no adventure is complete until you travel the Yellow trail. An established Prairie offers many cool plants to hold and touch. Big leaved Prairie Dock or fingered Compass plant express themselves with texture and smells. Take hold and feel the temperature change with the heat of the day. These plants stay cool in the hottest of heat. Downhill from here and into the woods you go once more. Pass through the Meadow, which was once an old field used by a long ago farmer. Trees scatter the landscape as it makes up its mind on what habitat to become. Back to the trailhead is just a few steps away now, take a short break at a table in the pines. Notice that all the trees are growing in straight rows. What is up with this strange lineup?

One last stop before you head home, come back inside and turn right through the door. What is this? The Planetarium, how did you miss this space the first time inside? Go check out the out-of-this-world exhibit, and if the director is free, ask him if you can step inside under the dome to see the star machine. This is a really cool adventure, of exploring the places yet to be discovered, where no one has gone before.

Now, were you bored?





Return Service Requested

Friends of Retzer Nature Center

The Friends of Retzer Nature Center is a registered, 501 (c)3, organization dedicated to encouraging, perpetuating, and promoting the work of conservation and natural resource education.

The organization seeks the involvement of the community in the form of financial and volunteer support to work toward the continued growth and improvement of Retzer Nature Center. If you would like to become a member or view some of our projects and activities, please visit our web site at http://FriendsOfRetzer.org.

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3. Questions about ticks have been particularly plentiful this year. The most often asked question was concerned with, "How can I prevent being bitten by a tick? First, avoiding tick infested areas is becoming harder to do. I know several people who actually contracted Lyme disease in their own back yard. Many people use insect repellants containing DEET, this can be effective for a few hours in the woods. The CDC recommends using DEET with a 30% concentration. The 100% DEET products are not any more effective, and prolonged use could lead to neurological problems. For example, of the DEET that contacts your skin some of it is absorbed into your body, and 10% of it can be recovered in a person's urine. As a graduate student researching tick ecology, I needed to keep the ticks alive for Laboratory work so I did not use any repellant. I worked in some of the most heavily tick infested locations in Wisconsin and relied on tucking my pants into tall boots and doing regular tick checks. It works. In one of my study sites I collected over 250 deer ticks in about one hour. I never had a tick on me long enough to begin feeding. Another safe and very effective method of protecting yourself from tick bites is to use a spray containing Permethrin. Almost all major insect spray manufacturers now sell a Permethrin spray. It is applied to boots, clothing, backpacks, etc., usually the day before you wear them. Extensive testing by the US Army has shown that it remains effective for about 10 days, even after going through the washing machine 10 times. Any tick that walks on Permethrin treated areas will never live long enough to attach and feed. Permethrin has a very low toxicity to humans (and all mammals) and very little of it is absorbed through the skin even if your clothing gets soaked in a rain storm. In fact, whatever is absorbed is quickly broken down by ester hydrolysis and rendered inert. If you suspect there may be a tick on your clothing, it is good to remember that a tick can survive the washing machine, but a hot dryer is a sure bet to kill it. Ticks can be active any month of the year. I have found ticks on sunny days in January and February on south facing slopes very actively "questing" for a host on twig or stem of grass. We have about two dozen species of ticks in Wisconsin, many of them are relatively specific for a particular group. Here are a few examples, Ixodes banksi prefers beaver, otter, mink and muskrat. Ixodes cookie (the woodchuck tick) is mostly found on woodchuck and raccoon. Ixodes sculptus is the ground squirrel tick. There are two species of Haemaphysalis ticks in Wisconsin, one is host specific to birds and the other on rabbits and snowshoe hare. The deer tick, or more correctly, the black-legged tick *Ixodes scapularis* and the wood tick Dermacentor variabilis are not very species specific and are the ticks most often found feeding on people.

THE ELEPHANT CATAPILLAR AND THE HAIRY WILLOW-HERB

I saw an "elephant "of sorts at Retzer this summer. It seemed to be enjoying a meal on a purple plant in the fen planting down the trail from the nature center. Actually it was a very large, greenish caterpillar larva of the elephant hawk -moth *Deilephilia elpenor*. It was busy chomping away on the green leaves of an invasive plant we came across at Retzer the other day – the hairy willow-herb *Epilobium hirsutum L*.

The other day while walking by the fen planting here, Dick Bautz (Retzer Naturalist) and I noticed some beautiful purple-magenta tall flowers growing in this wet area. It was when we stopped and took a closer look at the leaf

structure of this plant that we discovered the large caterpillar. There are often surprises like this when you take a closer look at plants and how they fit into the larger picture of the ecosystem. So I will tell you a few more interesting facts about the elephant caterpillar.

The large caterpillar I saw is the larva of the elephant hawk-moth. This moth is a large moth (in the Sphingidae family) but that is not how it got its name. The elephant hawk moth gets its name from the appearance of its larva, not because it's big but because it has a trunk-like nose. "The anterior of the caterpillar appears to have a trunk-like snout. It is this elephant look, rather than its large size, that gives the moth its name. When startled, the caterpillar draws its trunk into its foremost body segment. When it senses danger, like when a bird is looking for a meal, it can withdraw its trunk creating a slightly more bulbous head shape. It has eye-like markings on the sides of its head that can also help it to scare off potential predators "(wikepedia.org). It weighs about 8 grams. (A real elephant weighs about 15,000 lbs.) and it will eventually turn into a moth-the elephant hawk moth late summer-fall. In the mean time it was busy eating the leaves of an invasive plant, at Retzer, the hairy willow-herb. (Real elephants are herbaceous and like to eat leaves too!) Now back to the hairy willow-herb story.

When I first saw this tall purple flowered plant growing in the fen planting (and not recognizing it), I hoped that it was a native. It added a nice colorful accent to the area. There are a variety of purple native plants flowering this time of year at Retzer, like pale purple coneflower, leadplant and purple prairie clover. Unfortunately the



hairy-willow herb is not so great ecologically, where it was growing at Retzer. Like many invasive-type plants it started out as a desirable garden-type plant. Then, unintentionally or intentionally, it got released into natural areas and somehow found its way into the Retzer fen planting.

Like many invasives, it is very colorful, pleasing to the eye and (as an artist) I wanted to paint it! It is a member of the Evening-Primrose family, Onagraceae . Not all willow-herbs are invasive. There are 5 native species of willow-herbs in Wisconsin (Emmet J. Judziewicz, Wildflowers of Wisconsin and the Upper Midwest). They are generally shorter and smaller. I would like to paint them too! They don't have the potential to take over habitats like the hairy willow-herb does. If you want to learn the latest about invasives, there is a book called Invasive Species-What Everyone Needs to Know, by Daniel Simberloff, that offers a wide range of information about invasives.

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There is much more to be discovered at Retzer, like where did all the elephant caterpillars go? They disappeared a few days after we saw them. They probably were a tasty meal for a bird or small mammal.

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Push me –Pull me. Work your way over to the glacier rock display and search for a few of the unusual fossils hidden in amongst the sedimentary, metamorphic or igneous specimens. Can you find the state's fossil? Just few steps to the prairie underground to where we have unearthed a menagerie of critters that dwell under this native landscape. Not sure what you have found? Push the button to light up a clue to an above



ground entrance. Still under construction, this exhibit will only get better as new animals are placed in their special cubby. Time for some play, check out the hands-on table where mammal fur, skulls and other cool natural items can bring out the kids in all of us once again. Pick out a puppet or two for an impromptu show, or wrap up in a coyote skin as you sneak up on some unsuspecting prey. Discover the texture of each object as you explore the bones, fungi and hives littering the table top. Don't forget to stop by the wildlife exhibit for a show by each of the nine animals who call the nature center home. They work for a living as they teach school children and adults about their different adaptations and habitats. A couple might be sleeping, as they were up most of the night, or you might find a few just hanging around as they pretend they are sticks. Whatever the show, each will provide a good long viewing before you move onto the next window. Scattered around the hall, animal displays tell a story of what will happen next. Will the fox catch the rabbit? Will Woodcocks find a meal as they poke around in the ground? How can that poor muskrat get any sleep with a party going on outside his den? Take a minute to learn about the geothermal system that helps control the temperature in our building, or watch a video slideshow from the wildlife camera on the TV screen above the bird cage.

Grab a drink of water and head outside for more adventures waiting to be discovered. Start off at the trail-head and pick the best route for you to wander along. Each of the color-coded trails offers a different habitat of plants and animals to explore and enjoy. The Blue trail is a wet and wild journey along the hill side prairie and then down to the pond, where piers provide a handy platform to spy on a few aquatic creatures. Work your way back along creek and low hillside, where the tall Rosinweed and Goldenrod cast a canopy against the creek-side trees.

Meet up with the Red trail, home to a wooded habitat, pick a direction -- do you go south or west? No matter which path you head down, you will continue with your adventure. Heading west, hop on the boardwalk as you cross over this naturally spring fed landscape. Listen for the Red Squirrel scolding you as you pass through its domain. Sneak up on the babbling brook of Retzer Creek. What can you find lurking in the water? Look for Skunk Cabbage or a few uprooted trees as you travel along the path. Once you leave the boardwalk, the tall majestic Scotch



Pines wave to you as the wind blows though. Spy a mushroom fairy ring or collect a handful of chewed pinecones (only to discover all the seeds have been removed). What mysteries await you on the next turn of the trail?

Still not ready to head home, cross over to the Black connector trail spur and work your way through the tall pine plantation and Oak Savanna, uphill for most of the way. Empty out on the Field of Dreams, where "if you



plant it they will come". Home to hawks, owls and other birds of prey just waiting for a small critter to come out of the brush piles scattered around the landscape. Spend a quiet moment as you follow the Green trail through the Legacy Forest and remember all those who have been honored with specially planted Oak trees. Out onto the hay-field, where you might be lucky enough to see the Bobolink displaying its showy dance for protection of its nest. This performance occurs in the late spring to early summer.

Take in the view before you set out on the final leg of your exploration, no adventure is complete until you travel the Yellow trail. An established Prairie offers many cool plants to hold and touch. Big leaved Prairie Dock or fingered Compass plant express themselves with texture and smells. Take hold and feel the temperature change with the heat of the day. These plants stay cool in the hottest of heat. Downhill from here and into the woods you go once more. Pass through the Meadow, which was once an old field used by a long ago farmer. Trees scatter the landscape as it makes up its mind on what habitat to become. Back to the trailhead is just a few steps away now, take a short break at a table in the pines. Notice that all the trees are growing in straight rows. What is up with this strange lineup?

One last stop before you head home, come back inside and turn right through the door. What is this? The Planetarium, how did you miss this space the first time inside? Go check out the out-of-this-world exhibit, and if the director is free, ask him if you can step inside under the dome to see the star machine. This is a really cool adventure, of exploring the places yet to be discovered, where no one has gone before.

Now, were you bored?





Return Service Requested

Friends of Retzer Nature Center

The Friends of Retzer Nature Center is a registered, 501 (c)3, organization dedicated to encouraging, perpetuating, and promoting the work of conservation and natural resource education.

The organization seeks the involvement of the community in the form of financial and volunteer support to work toward the continued growth and improvement of Retzer Nature Center. If you would like to become a member or view some of our projects and activities, please visit our web site at http://FriendsOfRetzer.org.

Winter 2014

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I'm Bored!

Page 8-9

Upcoming Events:

- * Waukesha JanBoree January 17 –19
- * Wild Winter Night February 1
- * Earth Week April 21-26
- * Spring Plant Sale May 10

Log on to www.waukeshacountyparks.com for more information.

HIDE AND SLEEP

Originally printed in 2002-03 Centerline

What better way to ease through Winter months than to discover a safe and cozy space, dig in, supply, and (in a comfy curl-up) ignore the whole darn season. That's my system. Sometimes it works. Many of the Nature Center's habitants go along with the idea. It's called hibernation.



Hibernation is an inactive sleeplike state that many animals enter into during winter months. The sleeping state is a protection against the cold and reduces the need of food. Body temperatures are lowered. Heartbeat and breathing are slowed down, and the animals need less energy to stay alive. Their stored-up body fat helps them to survive the cold weather when food may be scarce or unobtainable.

One tiny critter practicing a hibernation system is the Meadow Jumping Mouse (Zapus hudsonius). This little creature, in kind weather, uses its long tail for balance and its long hind legs to spring about in the fields, in zigzagging jumps to evade the owls, weasels and other predators of the night. Most mice use a burrow for a year round refuge. The Meadow Jumping Mouse, however, uses the burrow only for its winter-long hibernation. The tiny mammal curls up in the nest, two to three feet below the surface of the ground in October and November, and settles into winter sleep. The nose is bent down between the hind legs and the tail is wrapped round and round the whole body. Here the little mouse remains sleeping until April or May. A tiny fur package, gift wrapped without paper or cord.

Another entertaining character one can spy on only during the warmer months is the Woodchuck or Groundhog (<u>Marmota monax</u>). With his chunky yellowish-gray body, big head, short legs and small bushy tail, the woodchuck can be found waddling around open

Page1

forests, meadows and in watery areas of river and creek. Before winter's hibernation, the woodchuck spends earlier months eating greenery to fatten up. He digs complicated burrow systems, in lengths of 40 feet or more, usually with front and back entrances – at times even side entrances. Tunnels are at least 4 feet in depth so they will be below the frost level. The tunnels are always neat and clean. The nest areas are carefully lined with dry grasses or leaves. When it comes to housekeeping, the groundhog is one neat freak that keeps cleaning, dusting and arranging. The end of October finds the woodchuck in hibernation within a safe warm dwelling. He remains settled in until late winter. One misunderstanding about groundhog behavior has been blown way out of proportion. Myth states that every February 2nd, the groundhog emerges from his burrow to look for his shadow and, because of this curious act, becomes the nation's most sought after weather forecaster. Any woodchuck will shake his big head when confronted with this nonsense. The mammal has spent the better part of the year eating, planning and digging into comfortable accommodations. The groundhog is not going to be interrupted from a great snooze just to look for his shadow, of all things!

Another small mammal roaming Retzer's fields, and a true hibernator, is the Thirteen-lined Ground Squirrel (Spermophilus tridecemlineatus). Also called the Federation Squirrel because of the "stars and stripes" in the back patterns. One becomes curious concerning the number thirteen in the name, because most of the texts list the stripe count at twenty-three. Twelve dark and eleven light. So how did thirteen end up in the equation? In spite of his additions, this little critter is cute and amusing to watch during his before-winter seasons. Like the woodchuck, the ground squirrel is a true hibernator. This squirrel



enters sleep in September or October, and wakes in March or April. So the little guy sleeps through half of his life. Being a burrowing animal, work time is spent constructing underground labyrinths for safe hide-aways, nurseries and hibernation dens. Activities keep the ground squirrel very busy the other half of his life.

Other inhabitants sleeping on the premises, and familiar to all who frequent the trails, are considered partial hibernators. Mammals that go into states of sleep, alone or in groups, and experience bouts of sleep alternating with bouts of wakefulness, fall into this group. They can bring themselves out of hibernation at any time and if the weather should be rather warm for periods, they will go out on excursions for food or exercise. If not so inclined they can picnic on their stored caches. During harsh months of winter they will remain in hidden burrows, crevices, tree openings, etc. Familiar animals in this category are the opossums, raccoons, skunks and chipmunks, to name a few.

For cold-blooded sleepers, hibernation has special consequences. Cold-blooded hibernators include the Amphibians – frogs and toads – and the Reptiles – lizards, snakes and turtles. These small creatures have body temperatures that rise and fall depending upon temperatures around them. As cold weather brings body temps low, hibernation occurs. The reverse also proves true. The cold-blooded can only be aroused when the environment warms enough to heat their bodies. No choice in the matter. However, Amphibian or Reptile, each will try to find suitable space for winter's sleep.





An interesting fact was brought to my attention when deciding to write on hibernation. Noted in an old Retzer log book, dated 9-30-89, the log stated ... "2 Garden Snakes and one Brown Snake were found resting below the surface of a nearly-abandoned Mound Builder Ant colony at edge of Retzer Old-Field #17 and edge of Red Pines – Adventure Trail Pines." The two species were resting together in what is referred to as a Snake Hibernaculum. Strange that two different species of snake would become roommates in the same hibernaculum for the winter. However, in researching for the article, this occurrence was found not to be unusual. Snakes will shelter down to three feet below ground surface. Here they can survive and be protected from freezing during the cold months of winter. They take areas in crevices, abandoned burrows or other holes left in the earth but deep enough to be frost-free. Further research delving around hibernation related that if sites in the area were scarce, snakes, sometimes by the hundreds and of different species, will congregate in the same space to hibernate. The hibernaculum becomes one big slumber party.

See you on the trail,

Shirley Blanchard

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10:00 am-4:00 pm

www.janboree.org

AT RETZER NATURE CENTER **February 1, 2014** 6:00 pm-9:00 pm \$2.00 per person at the door

WILD WINTER NIGHT



Ask the Wildlife Specialist-

By: Dick Bautz

Throughout the year, I am asked to respond to natural history and plant questions that come to the Nature Center. Here are a few examples:

1. Someone phoned and mentioned that they saw a snake in the North Prairie area and asked if I could identify it. The snake was seen in an undeveloped area of mixed grass and forbs, mostly non-native plant species, with some open sand-blow areas. The snake was about two and one-half feet long with black white and reddish bands. There is only one snake that fits this description, but remember, that a snake on the move is difficult to observe, and the person that called gave a pretty



good description considering he only saw a quick glimpse of a fast moving snake. Here are some clues if you want to figure it out before I name it. First, the whitish background can vary from almost white to light gray to light brown, and it naturally appears much lighter than the black and reddish markings it surrounds. Second, the reddish color is correct, and in this species it can vary from very red to reddish-brown to brown. These bands are actually large, somewhat evenly spaced blotches, sometimes surrounded by a narrower black border and sometimes the black-red-black-white-black, blotches are near equal in size. The reddest varieties are a favorite of the pet trade. Here are the final clues. Its belly has a distinctive black and white checker board pattern. Its bite is not serious, but the snake can give off an objectionable odor if handled roughly. This is an Eastern Milk snake, Lampropeltis triangulum The Latinized Greek name "Lampropeltis" translates to "bright shield" and "triangulum" refers to the snake's three colors. This species originally lived in oak savannas, upland hardwoods and prairies across eastern North America. Today they can also be found in old fields, around farms buildings; a few years ago while doing a biological survey for the DNR, I saw one in an undeveloped field with some prairie plants next to a Walmart store, most likely hunting house mice around the dumpster. Their principle prey items are small mammals, but they will also take large insects, eggs and nestlings of ground -nesting birds, and smaller snakes. Like all generalist feeders, they are not habitat specialists, and generally survive well in partly degraded habitats. A few years ago, a friend ordered a truck load of wood chips in the fall, and was surprised to find several Milk Snakes and a Fox snake had already retired for the winter into the chip pile before delivery.

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Janet MacIver Seasonal Biologist



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Push me –Pull me. Work your way over to the glacier rock display and search for a few of the unusual fossils hidden in amongst the sedimentary, metamorphic or igneous specimens. Can you find the state's fossil? Just few steps to the prairie underground to where we have unearthed a menagerie of critters that dwell under this native landscape. Not sure what you have found? Push the button to light up a clue to an above



ground entrance. Still under construction, this exhibit will only get better as new animals are placed in their special cubby. Time for some play, check out the hands-on table where mammal fur, skulls and other cool natural items can bring out the kids in all of us once again. Pick out a puppet or two for an impromptu show, or wrap up in a coyote skin as you sneak up on some unsuspecting prey. Discover the texture of each object as you explore the bones, fungi and hives littering the table top. Don't forget to stop by the wildlife exhibit for a show by each of the nine animals who call the nature center home. They work for a living as they teach school children and adults about their different adaptations and habitats. A couple might be sleeping, as they were up most of the night, or you might find a few just hanging around as they pretend they are sticks. Whatever the show, each will provide a good long viewing before you move onto the next window. Scattered around the hall, animal displays tell a story of what will happen next. Will the fox catch the rabbit? Will Woodcocks find a meal as they poke around in the ground? How can that poor muskrat get any sleep with a party going on outside his den? Take a minute to learn about the geothermal system that helps control the temperature in our building, or watch a video slideshow from the wildlife camera on the TV screen above the bird cage.

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Pines wave to you as the wind blows though. Spy a mushroom fairy ring or collect a handful of chewed pinecones (only to discover all the seeds have been removed). What mysteries await you on the next turn of the trail?

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Take in the view before you set out on the final leg of your exploration, no adventure is complete until you travel the Yellow trail. An established Prairie offers many cool plants to hold and touch. Big leaved Prairie Dock or fingered Compass plant express themselves with texture and smells. Take hold and feel the temperature change with the heat of the day. These plants stay cool in the hottest of heat. Downhill from here and into the woods you go once more. Pass through the Meadow, which was once an old field used by a long ago farmer. Trees scatter the landscape as it makes up its mind on what habitat to become. Back to the trailhead is just a few steps away now, take a short break at a table in the pines. Notice that all the trees are growing in straight rows. What is up with this strange lineup?

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Now, were you bored?





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Winter 2014

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I'm Bored!

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Upcoming Events:

- * Waukesha JanBoree January 17 –19
- * Wild Winter Night February 1
- * Earth Week April 21-26
- * Spring Plant Sale May 10

Log on to www.waukeshacountyparks.com for more information.

HIDE AND SLEEP

Originally printed in 2002-03 Centerline

What better way to ease through Winter months than to discover a safe and cozy space, dig in, supply, and (in a comfy curl-up) ignore the whole darn season. That's my system. Sometimes it works. Many of the Nature Center's habitants go along with the idea. It's called hibernation.



Hibernation is an inactive sleeplike state that many animals enter into during winter months. The sleeping state is a protection against the cold and reduces the need of food. Body temperatures are lowered. Heartbeat and breathing are slowed down, and the animals need less energy to stay alive. Their stored-up body fat helps them to survive the cold weather when food may be scarce or unobtainable.

One tiny critter practicing a hibernation system is the Meadow Jumping Mouse (Zapus hudsonius). This little creature, in kind weather, uses its long tail for balance and its long hind legs to spring about in the fields, in zigzagging jumps to evade the owls, weasels and other predators of the night. Most mice use a burrow for a year round refuge. The Meadow Jumping Mouse, however, uses the burrow only for its winter-long hibernation. The tiny mammal curls up in the nest, two to three feet below the surface of the ground in October and November, and settles into winter sleep. The nose is bent down between the hind legs and the tail is wrapped round and round the whole body. Here the little mouse remains sleeping until April or May. A tiny fur package, gift wrapped without paper or cord.

Another entertaining character one can spy on only during the warmer months is the Woodchuck or Groundhog (<u>Marmota monax</u>). With his chunky yellowish-gray body, big head, short legs and small bushy tail, the woodchuck can be found waddling around open

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forests, meadows and in watery areas of river and creek. Before winter's hibernation, the woodchuck spends earlier months eating greenery to fatten up. He digs complicated burrow systems, in lengths of 40 feet or more, usually with front and back entrances – at times even side entrances. Tunnels are at least 4 feet in depth so they will be below the frost level. The tunnels are always neat and clean. The nest areas are carefully lined with dry grasses or leaves. When it comes to housekeeping, the groundhog is one neat freak that keeps cleaning, dusting and arranging. The end of October finds the woodchuck in hibernation within a safe warm dwelling. He remains settled in until late winter. One misunderstanding about groundhog behavior has been blown way out of proportion. Myth states that every February 2nd, the groundhog emerges from his burrow to look for his shadow and, because of this curious act, becomes the nation's most sought after weather forecaster. Any woodchuck will shake his big head when confronted with this nonsense. The mammal has spent the better part of the year eating, planning and digging into comfortable accommodations. The groundhog is not going to be interrupted from a great snooze just to look for his shadow, of all things!

Another small mammal roaming Retzer's fields, and a true hibernator, is the Thirteen-lined Ground Squirrel (Spermophilus tridecemlineatus). Also called the Federation Squirrel because of the "stars and stripes" in the back patterns. One becomes curious concerning the number thirteen in the name, because most of the texts list the stripe count at twenty-three. Twelve dark and eleven light. So how did thirteen end up in the equation? In spite of his additions, this little critter is cute and amusing to watch during his before-winter seasons. Like the woodchuck, the ground squirrel is a true hibernator. This squirrel



enters sleep in September or October, and wakes in March or April. So the little guy sleeps through half of his life. Being a burrowing animal, work time is spent constructing underground labyrinths for safe hide-aways, nurseries and hibernation dens. Activities keep the ground squirrel very busy the other half of his life.

Other inhabitants sleeping on the premises, and familiar to all who frequent the trails, are considered partial hibernators. Mammals that go into states of sleep, alone or in groups, and experience bouts of sleep alternating with bouts of wakefulness, fall into this group. They can bring themselves out of hibernation at any time and if the weather should be rather warm for periods, they will go out on excursions for food or exercise. If not so inclined they can picnic on their stored caches. During harsh months of winter they will remain in hidden burrows, crevices, tree openings, etc. Familiar animals in this category are the opossums, raccoons, skunks and chipmunks, to name a few.

For cold-blooded sleepers, hibernation has special consequences. Cold-blooded hibernators include the Amphibians – frogs and toads – and the Reptiles – lizards, snakes and turtles. These small creatures have body temperatures that rise and fall depending upon temperatures around them. As cold weather brings body temps low, hibernation occurs. The reverse also proves true. The cold-blooded can only be aroused when the environment warms enough to heat their bodies. No choice in the matter. However, Amphibian or Reptile, each will try to find suitable space for winter's sleep.





An interesting fact was brought to my attention when deciding to write on hibernation. Noted in an old Retzer log book, dated 9-30-89, the log stated ... "2 Garden Snakes and one Brown Snake were found resting below the surface of a nearly-abandoned Mound Builder Ant colony at edge of Retzer Old-Field #17 and edge of Red Pines – Adventure Trail Pines." The two species were resting together in what is referred to as a Snake Hibernaculum. Strange that two different species of snake would become roommates in the same hibernaculum for the winter. However, in researching for the article, this occurrence was found not to be unusual. Snakes will shelter down to three feet below ground surface. Here they can survive and be protected from freezing during the cold months of winter. They take areas in crevices, abandoned burrows or other holes left in the earth but deep enough to be frost-free. Further research delving around hibernation related that if sites in the area were scarce, snakes, sometimes by the hundreds and of different species, will congregate in the same space to hibernate. The hibernaculum becomes one big slumber party.

See you on the trail,

Shirley Blanchard

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10:00 am-4:00 pm

www.janboree.org

AT RETZER NATURE CENTER **February 1, 2014** 6:00 pm-9:00 pm \$2.00 per person at the door

WILD WINTER NIGHT



Ask the Wildlife Specialist-

By: Dick Bautz

Throughout the year, I am asked to respond to natural history and plant questions that come to the Nature Center. Here are a few examples:

1. Someone phoned and mentioned that they saw a snake in the North Prairie area and asked if I could identify it. The snake was seen in an undeveloped area of mixed grass and forbs, mostly non-native plant species, with some open sand-blow areas. The snake was about two and one-half feet long with black white and reddish bands. There is only one snake that fits this description, but remember, that a snake on the move is difficult to observe, and the person that called gave a pretty



good description considering he only saw a quick glimpse of a fast moving snake. Here are some clues if you want to figure it out before I name it. First, the whitish background can vary from almost white to light gray to light brown, and it naturally appears much lighter than the black and reddish markings it surrounds. Second, the reddish color is correct, and in this species it can vary from very red to reddish-brown to brown. These bands are actually large, somewhat evenly spaced blotches, sometimes surrounded by a narrower black border and sometimes the black-red-black-white-black, blotches are near equal in size. The reddest varieties are a favorite of the pet trade. Here are the final clues. Its belly has a distinctive black and white checker board pattern. Its bite is not serious, but the snake can give off an objectionable odor if handled roughly. This is an Eastern Milk snake, Lampropeltis triangulum The Latinized Greek name "Lampropeltis" translates to "bright shield" and "triangulum" refers to the snake's three colors. This species originally lived in oak savannas, upland hardwoods and prairies across eastern North America. Today they can also be found in old fields, around farms buildings; a few years ago while doing a biological survey for the DNR, I saw one in an undeveloped field with some prairie plants next to a Walmart store, most likely hunting house mice around the dumpster. Their principle prey items are small mammals, but they will also take large insects, eggs and nestlings of ground -nesting birds, and smaller snakes. Like all generalist feeders, they are not habitat specialists, and generally survive well in partly degraded habitats. A few years ago, a friend ordered a truck load of wood chips in the fall, and was surprised to find several Milk Snakes and a Fox snake had already retired for the winter into the chip pile before delivery.

2. The next question was about the plastic, "deer whistles" sold to prevent deer-car collisions. The whistles are usually mounted on the front bumper of the car and are claimed to produce an ultra-sonic sound while the car is moving, that will alert the deer and cause it to move away from the roadway. A variety of these devices were tested at UW Madison Department of Wildlife Ecology, and it was found that none of the deer whistles had any effect on deer.

The best way to avoid hitting a deer with your car is to stay alert and avoid the peak activity periods of the deer. Deer-car crashes are greatest in October and November, with a second peak in May and June.

In 2012 there were 710 deer-vehicle crashes in Waukesha County, only Dane (815) and Shawano (800) Counties had more crashes. Unfortunately, the time of day activity pattern for deer coincide with our morning and evening traffic patterns, mainly between 5:00 a.m. to 8:00 a.m. in the morning and again from 5:00 p.m. to 11:00 p.m. in the evening.



3. Questions about ticks have been particularly plentiful this year. The most often asked question was concerned with, "How can I prevent being bitten by a tick? First, avoiding tick infested areas is becoming harder to do. I know several people who actually contracted Lyme disease in their own back yard. Many people use insect repellants containing DEET, this can be effective for a few hours in the woods. The CDC recommends using DEET with a 30% concentration. The 100% DEET products are not any more effective, and prolonged use could lead to neurological problems. For example, of the DEET that contacts your skin some of it is absorbed into your body, and 10% of it can be recovered in a person's urine. As a graduate student researching tick ecology, I needed to keep the ticks alive for Laboratory work so I did not use any repellant. I worked in some of the most heavily tick infested locations in Wisconsin and relied on tucking my pants into tall boots and doing regular tick checks. It works. In one of my study sites I collected over 250 deer ticks in about one hour. I never had a tick on me long enough to begin feeding. Another safe and very effective method of protecting yourself from tick bites is to use a spray containing Permethrin. Almost all major insect spray manufacturers now sell a Permethrin spray. It is applied to boots, clothing, backpacks, etc., usually the day before you wear them. Extensive testing by the US Army has shown that it remains effective for about 10 days, even after going through the washing machine 10 times. Any tick that walks on Permethrin treated areas will never live long enough to attach and feed. Permethrin has a very low toxicity to humans (and all mammals) and very little of it is absorbed through the skin even if your clothing gets soaked in a rain storm. In fact, whatever is absorbed is quickly broken down by ester hydrolysis and rendered inert. If you suspect there may be a tick on your clothing, it is good to remember that a tick can survive the washing machine, but a hot dryer is a sure bet to kill it. Ticks can be active any month of the year. I have found ticks on sunny days in January and February on south facing slopes very actively "questing" for a host on twig or stem of grass. We have about two dozen species of ticks in Wisconsin, many of them are relatively specific for a particular group. Here are a few examples, Ixodes banksi prefers beaver, otter, mink and muskrat. Ixodes cookie (the woodchuck tick) is mostly found on woodchuck and raccoon. Ixodes sculptus is the ground squirrel tick. There are two species of Haemaphysalis ticks in Wisconsin, one is host specific to birds and the other on rabbits and snowshoe hare. The deer tick, or more correctly, the black-legged tick *Ixodes scapularis* and the wood tick Dermacentor variabilis are not very species specific and are the ticks most often found feeding on people.

THE ELEPHANT CATAPILLAR AND THE HAIRY WILLOW-HERB

I saw an "elephant "of sorts at Retzer this summer. It seemed to be enjoying a meal on a purple plant in the fen planting down the trail from the nature center. Actually it was a very large, greenish caterpillar larva of the elephant hawk -moth *Deilephilia elpenor*. It was busy chomping away on the green leaves of an invasive plant we came across at Retzer the other day – the hairy willow-herb *Epilobium hirsutum L*.

The other day while walking by the fen planting here, Dick Bautz (Retzer Naturalist) and I noticed some beautiful purple-magenta tall flowers growing in this wet area. It was when we stopped and took a closer look at the leaf

structure of this plant that we discovered the large caterpillar. There are often surprises like this when you take a closer look at plants and how they fit into the larger picture of the ecosystem. So I will tell you a few more interesting facts about the elephant caterpillar.

The large caterpillar I saw is the larva of the elephant hawk-moth. This moth is a large moth (in the Sphingidae family) but that is not how it got its name. The elephant hawk moth gets its name from the appearance of its larva, not because it's big but because it has a trunk-like nose. "The anterior of the caterpillar appears to have a trunk-like snout. It is this elephant look, rather than its large size, that gives the moth its name. When startled, the caterpillar draws its trunk into its foremost body segment. When it senses danger, like when a bird is looking for a meal, it can withdraw its trunk creating a slightly more bulbous head shape. It has eye-like markings on the sides of its head that can also help it to scare off potential predators "(wikepedia.org). It weighs about 8 grams. (A real elephant weighs about 15,000 lbs.) and it will eventually turn into a moth-the elephant hawk moth late summer-fall. In the mean time it was busy eating the leaves of an invasive plant, at Retzer, the hairy willow-herb. (Real elephants are herbaceous and like to eat leaves too!) Now back to the hairy willow-herb story.

When I first saw this tall purple flowered plant growing in the fen planting (and not recognizing it), I hoped that it was a native. It added a nice colorful accent to the area. There are a variety of purple native plants flowering this time of year at Retzer, like pale purple coneflower, leadplant and purple prairie clover. Unfortunately the



hairy-willow herb is not so great ecologically, where it was growing at Retzer. Like many invasive-type plants it started out as a desirable garden-type plant. Then, unintentionally or intentionally, it got released into natural areas and somehow found its way into the Retzer fen planting.

Like many invasives, it is very colorful, pleasing to the eye and (as an artist) I wanted to paint it! It is a member of the Evening-Primrose family, Onagraceae . Not all willow-herbs are invasive. There are 5 native species of willow-herbs in Wisconsin (Emmet J. Judziewicz, Wildflowers of Wisconsin and the Upper Midwest). They are generally shorter and smaller. I would like to paint them too! They don't have the potential to take over habitats like the hairy willow-herb does. If you want to learn the latest about invasives, there is a book called Invasive Species-What Everyone Needs to Know, by Daniel Simberloff, that offers a wide range of information about invasives.

Another characteristic of the hairy willow-herb is that it has autumnal growth. "Plants with autumnal growth (like many common forest plants such as sweet wild cicely, garlic mustard and many other plants), have a growth spurt in the August-to-September period. This allows them to store more nutrients in the root mass and show a fresh growth above ground after the summer's growth has senesced back. It also allows the plants to get a jump start on next year's growth, and it inadvertently supplies a winter-time banquet just below the snow for everything from meadow voles to white-tailed deer "(Dick Bautz).

There is much more to be discovered at Retzer, like where did all the elephant caterpillars go? They disappeared a few days after we saw them. They probably were a tasty meal for a bird or small mammal.

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